

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 09 AUG 2005

WIPO

PCT

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing

(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/EP2004/051256

International filing date (day/month/year)
25.06.2004

Priority date (day/month/year)
27.06.2003

International Patent Classification (IPC) or both national classification and IPC
C09B47/00, G11B7/24

Applicant

CIBA SPECIALTY CHEMICALS HOLDING INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Bakboord, J

Telephone No. +49 89 2399-2168



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/051256

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/051256

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. ☐ The International Searching Authority has not been able to consider the validity of the priority claim because a copy of the earlier application whose priority has been claimed was not available to the International Searching Authority at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

4. Additional observations, if necessary:

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:

☒ paid additional fees.

☐ paid additional fees under protest.

☐ not paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

☐ complied with

☒ not complied with for the following reasons:

see separate sheet

4. Consequently, this report has been established in respect of the following parts of the international application:

☒ all parts.

☐ the parts relating to claims Nos.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/051256

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-16
	No: Claims	
Inventive step (IS)	Yes: Claims	1-10, 12-16(partly)
	No: Claims	11, 12-16(partly)
Industrial applicability (IA)	Yes: Claims	1-16
	No: Claims	

2. Citations and explanations

see separate sheet

IV Lack of unity of invention

The technical problem to be solved by the present application seems to be how to provide novel possibly improved recording media. The solution to this problem can be seen in the provision of recording media in which a compound of formula I is used. Another solution to this problem is alleged to be the provision of recording media in which the recording layer has a thickness of from 30-80 nm in the depressions and a thickness of from 20 to 70 nm next to the depressions, the difference between the two being a maximum of 20 nm. No technical relationship between these two solutions is present. The application therefore lacks unity of invention (Rule 13 PCT).

V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

V.1 The invention relates to an optical recording material.

V.2 Reference is made to the following documents:

- D1: WO 00/75922 A
- D2: EP-A-0 519 395, cited in the application
- D3: US-A-5 580 696
- D4: GB-A-1 265 842, cited in the application
- D5: PATENT ABSTRACTS OF JAPAN vol. 0082, no. 13 (E-269), 28 September 1984 (1984-09-28) & JP 59 098467 A (PENTEL KK), 6 June 1984 (1984-06-06)
- D6: WO 98/45757 A
- D7: US 2003/090990 A1

V.3 Novelty

Document D1 discloses the use of copperphthalocyanines substituted with sulfonamide groups in optical recording materials (claim 1).

Document D2 discloses optical recording media, which comprise phthalocyanines substituted with sulfonamide groups (claim 1).

Document D3 discloses the use of phthalocyanines substituted with OR or SR groups in optical recording materials (claim 1).

Document D4 discloses the use of phthalocyanine substituted with sulfonhydrazide groups as antihalation dyes for the red-sensitive layer of silver-halide containing colour photographic materials.

Document D5 discloses phthalocyanines substituted with sulfonhydrazide groups for making a carbon body to secure an airpole as having a good polarization characteristic.

Document D6 discloses the use of phthalocyanines substituted with sulfonhydrazide groups in a black pigmented high molecular weight organic material.

Document D7 discloses an optical information recording medium comprising a substrate including a groove with a depth of 30 to 80 nm (claims 1 and 11).

An optical recording medium comprising in the recording layer a phthalocyanine compound substituted with sulfonhydrazide groups is disclosed in none of the documents. Claims 1-10 and 12 therefore fulfill the requirements of Art 33(2) PCT.

An optical recording medium comprising a substrate having depressions in which the recording layer has a thickness of from 30-80 nm in the depressions and a thickness of from 20 to 70 nm next to the depressions, the difference between the two being a maximum of 20 nm is disclosed in none of the documents. Claim 11 therefore fulfills the requirements of Art 33(2) PCT.

Claims 13-16 describe a method of recording or playing back data on an optical recording medium comprising a phthalocyanine compound substituted with sulfonhydrazide groups and are therefore novel as well.

V.4 Inventive step

Starting from documents D1-D3 the problem to be solved by the present application may be regarded as how to provide a novel possibly improved optical recording medium.

A. the solution of the applicant in claims 1-10 and 12-16 resides in providing recording media which comprise a phthalocyanine compound substituted with

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2004/051256

sulfonhyrazide groups. As the use of these kind of phthalocyanines has not been made obvious by the prior art to be used in optical recording media, the solution of the applicant may be regarded to involve an inventive step (Art 33(3) PCT).

B. the solution of the applicant in claims 11-16 resides in providing recording media in which the recording layer has a thickness of from 30-80 nm in the depressions and a thickness of from 20 to 70 nm next to the depressions, the difference between the two being a maximum of 20 nm. As there seem to be no examples in the application of such recording media, inventive step can at present not be acknowledged for this invention (Art 33(3) PCT).